

SAN FRANCISCO PUBLIC UTILITIES COMMISSION'S WATER SYSTEM
IMPROVEMENT PROGRAM (WSIP) SAFETY APPROACH

WSIP Safety Approach.

The Water System Improvement Program (WSIP) Construction "Safety Approach" applies to all personnel and companies contracted to work on any Project related to the SFPUC WSIP Construction program. As part of the Safety Approach, all Parties are required to comply with the WSIP contract safety requirements, the California Code of Regulations, Title 8, and all applicable Federal and Local regulatory standards. If there is a conflict between any applicable safety standards, the most stringent shall apply.

The goal of the Safety Approach is to establish superior safety performance on WSIP projects and to define roles, responsibilities, programs, policies and procedures to accomplish this goal. All Parties to this Approach shall implement measures to develop an acute awareness that shall promote error-free performance at the project worksites and facilitate achieving contract objectives in the safest manner possible. An additional WSIP safety goal is to construct each Project with ZERO incidents, totally free from accidents. This goal can only be achieved when everyone commits to error-free performance. The commitment to achieve this goal will result in increased productivity and the prevention of job related losses.

The successful implementation of this Safety Approach involves safety awareness at all levels of program/project management. The emphasis of top-down support is the key to the development of a safety culture within the WSIP projects. The primary participants in this Safety Approach are the construction general contractors including their subcontractors (collectively "GCs"), the Project Construction Management (CM) firms, the Program, Project, Pre-Construction Manager (PPPCM), and the Program Construction Manager (PCM). The following responsibilities of each participant provide the basis for implementing and monitoring the key elements of the Safety Approach that will minimize incidents and maximize project quality and productivity:

WSIP Contractors:

The GCs will have *full and total* responsibility for the construction means, methods, techniques and all construction site safety on the project. The GCs will:

- Commit to a serious, rigorous and persistent WSIP Safety Approach.
- Develop a project safety plan that conforms to the requirements of the Safety Approach and all applicable laws, rules and regulations.
- Implement and administer the GCs' safety plans in compliance with the WSIP Safety rules, regulations and Approach guidelines.
- Document that each employee has received and understands appropriate Project site-specific orientation and training and provides this

- documentation to the Project CM.
- Ensure that each employee is trained in proper work practices to perform his/her job safely and ensure that the required documentation is provided to the Project CM to verify this training.
 - Verify that each employee understands the hazards related to the Project and the applicable provisions of the emergency action and medical emergency plans.
 - Ensure that all subcontractors comply with the requirements of the Safety Approach and the GCs' safety plans and take corrective actions to ensure this compliance requirement.
 - Provide the Project with a person who is a “Qualified” safety professional and “Competent person(s)” as defined in OSHA, and outlined in the project specifications.
 - Provide, at a minimum, a weekly documented safety inspection of the construction activities in accordance with California Code of Regulations, Title 8, Sections 1509 and 3203 (a) (4)(A)(B)(C), complete with corrective actions to the Project CM and WSIP Resident Engineer (RE), if requested.
 - Conduct daily documented inspections of the Project site with special emphasis on observing and correcting unsafe worker behavior and Project site conditions.
 - Develop written Job Hazard Analysis (JHA) reports for Project high-hazard construction work activities and provide this written documentation to the Project CM prior to beginning work.
 - Conduct, at a minimum, safety and health meetings every ten working days that are relevant to the specific types of work at the Project site, which comply with California Code of Regulations, Title 8, Sections 1509 and 3203 (a) (7) (A)-(F). The GC shall prepare documentation of meeting content and worker attendance and provide this documentation to the Project CM.
 - Investigate all incidents, accidents and near misses involving all workers, visitors or equipment. The responsible Project CM shall be informed by the GC of all incidents at the time of occurrence, Initial written incident reports shall be submitted to the Project CM within 24 hours of the occurrence with the final investigation reports submitted to the Project CM within 48 hours of the incident.
 - Provide written project incident “Root Cause” and corrective action results to the Project CM within Ten (10) working days for review.
 - Submit a monthly project statistical report to the Project CM. The statistical report shall include hours worked by the GC, “OSHA Recordable” Incidents and Incident Rate, “Lost Work Day Cases” and Incident Rate, Lost Work Days and Days Away from Work (DAW) Rate “First Aid Cases” and “Property Damage” Incidents.
 - Remove any workers and supervisors from the project site who violate the GC or Safety Approach rules and procedures.
 - Ensure that GC and subcontractor supervisors understand and enforce safe work practices.

- Enroll all Project GC management, supervisors and contractor site supervision in the WSIP Site-Specific Project Safety Orientation training within ten (10) working days of mobilization.
- Ensure that all “Personal Protective Equipment” is available and being used properly by project workers.
- Ensure that all construction equipment and motor vehicle certifications, inspections, repair and controls are in place and in compliance with project and regulatory requirements. Annual crane certification(s) and operator certifications shall be delivered to the Project CM prior to the crane(s) starting work on the Project.
- Ensure that lifting operations are in strict compliance with California Code of Regulations Title 8 and manufacturer’s specifications and limitations applicable to the operation of any and all cranes.
- Attend meetings (e.g. involving project IDLH, Safety Incidents, Stop Work) when requested and/or required by the Project CM or WSIP RE, which address project safety issues such as imminent hazards or shutdowns.
- Submit required safety plans, reports and training records to the Project CM for all projects hazardous materials work, such as but not limited to lead, asbestos, mold and contaminated soil.

WSIP Project Construction Management Firms:

The Project Construction Management (Project CM) firms will be responsible for monitoring the GCs' compliance with the WSIP Safety Approach as it relates to their projects as follows:

- Commit to a serious, rigorous, and persistent WSIP Safety Approach.
- Require GCs to report safety performance and issues within their area of responsibility at weekly construction meetings.
- Advise and take action as necessary to correct any observed project safety hazards that pose an imminent danger to life or health.
- Maintain and enforce GC incident notification requirements associated with timely reporting of all project incidents and/or injuries.
- Maintain and enforce requirements for the GC to prepare and submit written Incident Investigation reports per the Safety Approach.
- Maintain and enforce the timely submission of GC JHA reports, weekly safety audits, worker safety training documentation, OSHA safety permits, engineered shoring plans, crane inspections or any other WSIP safety documentation requirements.
- Notify the Regional CM/PCM Regional Safety Manager of all incidents and accidents

In addition, the Project CM firms will have full and total responsibility for the safety of their own employees and their subcontractors on their projects, and will develop project-specific safety plans for review by the PCM Program Safety Manager. Related duties and responsibilities include:

- Ensure that all Project CM supervisory staff attends the WSIP Site-Specific Safety Orientation training.
- Ensure that the Project CM staff and Project CM subcontractors understand and comply with the Safety Approach.
- Ensure that all “Personal Protective Equipment” is available and being used properly by Project CM employees and subcontractors.

WSIP Program, Project, Pre-Construction Manager (PPPCM)

The Program, Project, Pre-construction Manager (PPPCM) will be responsible for the preconstruction planning of the WSIP Safety Approach. The PPPCM will develop safety requirements of the Approach for review and adoption by the SFPUC. Specific duties and responsibilities are as follows:

- Commit to a serious, rigorous and persistent WSIP safety approach.
- Assist the SFPUC develop a safety approach for WSIP.
- Develop the WSIP Construction Management Plan around the approved WSIP Safety Approach.
- Establish requirements for construction contracts that conform to the WSIP Safety Approach, including a Division 0 Document implementing the WSIP Safety Approach.
- Establish requirements for construction management contracts that conform to the WSIP Safety Approach.
- Review of all construction design specifications and pre-construction site hazard analysis documentation to confirm that pre-existing site hazardous conditions have been addressed in the Contract Documents
- Ensure that applicable safety, health and insurance requirements are communicated to prospective bidders during the Pre-Bid process.

WSIP Program Construction Manager:

The Program Construction Manager (PCM) will be responsible for the implementation and monitoring of the Safety Approach by all program/project participants. Specific duties and responsibilities are as follows:

- Commit to a serious, rigorous, and persistent WSIP Safety Approach.
- Conduct a documented Pre-Construction Safety Review meeting with the project CM team and the GCs performing the work. Site Specific Safety Plan requirements and hazard assessment observations shall be reviewed.
- Review program/project site safety information at the weekly WSIP program progress meetings.
- Provide timely information to WSIP Program Management regarding program/project safety issues.
- Provide timely information to WSIP Program Management regarding project injury or incidents.
- Monitor Project CM team and GC incidents and injuries on the job site and ensure that required incident reports are completed in efficient and

- timely manner and submitted to WSIP Management.
- Investigate and provide a follow-up report to WSIP Management regarding any project where a Project CM issues a “stop work” directive due to safety issues or imminent danger to life or health.
 - Advise and take action as necessary to correct any observed project safety hazards that pose an imminent danger to life or health.
 - Attend and provide overview of WSIP Safety Approach at all pre-bid, pre-construction and pre-mobilization meetings.
 - Visit WSIP construction projects periodically as necessary (frequency to be determined by the nature of the project) to carry out the duties and responsibilities set forth in the WSIP Safety Approach.
 - Provide safety coordination with the SFPUC Health and Safety Program.
 - Provide safety consultation to Project CM and his/her team.
 - Provide safety monitoring services for WSIP hazardous material activities, such as lead, asbestos, mold or contaminated soil
 - Provide the professional services required to effectively monitor the regulatory compliance issues associated with WSIP construction activities. These duties will include collection of GC safety documentation for regulatory compliance, consultation with CAL/OSHA and Air Pollution Control District (APCD) inspectors and any local regulatory agencies associated with safety at the WSIP construction sites.
 - Provide Program/Project management, GC and Subcontractor supervisory staff with initial WSIP project specific safety orientation training. This mandatory training will focus on the Safety Approach requirements, specification information, safety documentation submission requirements, JHA/Incident Reporting review and Federal/State OSHA regulatory compliance requirements.
 - Provide WSIP “Safety Approach” Orientation training to WSIP staff and designated WSIP consultants.
 - Support WSIP in safety inspections (OSHA, APCD, etc.) conducted by regulatory agencies on WSIP project sites
 - Provide 24-hour a day, safety consultation services to the Project CM and RE. In addition, the PCM Regional Safety Manager will provide:
 - Follow-up Injury/Incident Investigations Oversight
 - Regulatory and Contract/Specification document review
 - Safety Coordination with SFPUC Health & Safety Program
 - Ensure that all “Personal Protective Equipment” is available and being used properly by PCM employees and subcontractors.
 - Ensure that all PCM supervisory staff attends WSIP Safety Orientation training.

SFPUC/WSIP:

As the Program Owner, the SFPUC/WSIP Staff will determine the overall approach to safety for WSIP, approve the overall approach to safety management for WSIP, authorize the resources necessary to effectively implement the Safety Approach, ensure contractual

documents define the requirements for conformance to the Safety Approach, and be responsible for establishing and maintaining the program support necessary for their staff working on the project sites. In addition, the SFPUC/WSIP Staff will:

- Commit to a serious, rigorous and persistent WSIP Safety Approach.
- Provide the PCM with specific SFPUC facility/operation safety requirements (e.g. hazardous materials, restricted areas, etc.) that could affect the WSIP construction project.
- Ensure pre-existing, site specific safety hazards are identified in the construction contracts.
- Ensure that the requirements for the Safety Approach are included in each Project CM and construction contract.
- Attend Project Safety Pre-Bid, Pre-Con and Pre-Mobilization meetings as part of the Safety Approach requirements.
- If providing the Construction Manager position on a project, initiate the Project CM responsibilities identified for WSIP Project Construction Management firms.
- If providing Project CM staff to a project managed by a Project CM firm, collaborate with the Project CM firm in the development of the project safety plan for the Project CM team.
- Advise and take action as necessary to correct any observed safety hazards that pose an imminent danger to life or health.
- Ensure that WSIP staff has required “Personal Protective Equipment” and that it is being utilized properly.
- Ensure that all SFPUC/WSIP supervisory staff attends WSIP Safety Orientation training.
- Incorporate the Monthly Program Safety Statistical Reports into scheduled WSIP management meetings for information and planning purposes.
- Ensure compliance with all SFPUC safety requirements as mandated by Federal, State and local laws, rules, regulations and policies as they apply to WSIP projects.